

contd.
a¹

A, D, E and G are identical or different and represent CH groups or nitrogen atoms,

L¹ and L² are identical or different and independently of one another each represents one or more radicals selected from the group consisting of hydrogen, halogen, hydroxyl, carboxyl, cyano, nitro, trifluoromethyl, trifluoromethoxy, (C₁-C₆)-alkyl, (C₁-C₆)-alkoxy and (C₁-C₆)-alkoxycarbonyl,

R¹ represents the CH₂-OH group, or
represents a radical of the formula CO-NR⁴R⁵,

in which

R⁴ and R⁵ are identical or different and each represents hydrogen or
(C₁-C₆)-alkyl,

R² represents (C₃-C₈)-cycloalkyl,
represents (C₁-C₈)-alkyl which is optionally interrupted by an oxygen or sulphur atom or by a radical NR⁶,
represents a 4- to 8-membered saturated heterocycle which is attached to the imidazole ring via a nitrogen atom and which optionally contains a further oxygen or sulphur atom, or
represents a 4- to 8-membered saturated heterocycle which contains a radical of the formula NR⁷ and optionally additionally one nitrogen, oxygen or sulphur atom,

where (C₃-C₈)-cycloalkyl, (C₁-C₈)-alkyl which is optionally interrupted by an oxygen or sulphur atom, the 4- to 8-membered saturated heterocycle which is attached to the imidazole ring via a nitrogen atom and which optionally contains a

in which

R⁶ and R⁷ are identical or different and each represents hydrogen, (C₁-C₆)-alkyl, hydroxy-(C₁-C₆)-alkyl or (C₃-C₇)-cycloalkyl,

R⁸ and R⁹ are identical or different and each represents hydrogen, (C₁-C₆)-alkyl, or (C₃-C₇)-cycloalkyl,

or

R⁸ and R⁹ together with the nitrogen atom form a 4- to 8-membered saturated heterocycle which may optionally additionally contain one oxygen or sulphur atom or a radical of the formula NR¹⁰,

in which

R¹⁰ represents hydrogen, (C₁-C₆)-alkyl or (C₃-C₇)-cyloalkyl,

and

R³ represents a phenyl, naphthyl, pyrimidinyl, pyridyl, furyl or thienyl ring, where the rings are optionally mono- or polysubstituted by radicals selected from the group

contol.
a¹

—consisting of halogen, hydroxyl, carboxyl, cyano, nitro, trifluoromethyl, trifluoromethoxy, (C₁-C₆)-alkyl, (C₁-C₆)-alkoxy and (C₁-C₆)-alkoxycarboxyl,

and their enantiomers and diastereomers and their respective salts, hydrates and prodrugs.

2. (Amended) Compounds according to Claim 1

where

A, D, E and G each represents the CH group,

or one of the radicals A, D, E and G represents a nitrogen atom and the others each represent the CH group,

L₁ and L₂ are identical or different and independently of one another each represents one or more radicals selected from the group consisting of hydrogen, fluorine, chlorine, cyano, trifluoromethyl and trifluoromethoxy,

R¹ represents the -CH₂-OH group, or
represents a radical of the formula -CO-NR⁴R⁵,

in which

R⁴ and R⁵ are identical or different and each represents hydrogen or
(C₁-C₃)-alkyl,

R² represents (C₃-C₇)-cycloalkyl,

contd.
a¹

represents (C₁-C₆)-alkyl which is optionally interrupted by an oxygen or sulphur atom or by a radical NR⁶,

represents a 5- to 7-membered saturated heterocycle which is attached to the imidazole ring via a nitrogen atom and which optionally contains a further oxygen or sulphur atom, or

represents a 5- to 7-membered saturated heterocycle which contains a radical of the formula NR⁷ and optionally additionally one nitrogen, oxygen or sulphur atom,

where (C₃-C₇)-cycloalkyl, (C₁-C₆)-alkyl which is optionally interrupted by an oxygen or sulphur atom, the 5- to 7-membered saturated heterocycle which is attached to the imidazole ring via a nitrogen atom and which optionally contains one further oxygen or sulphur atom and optionally (C₁-C₆)-alkyl which is interrupted by a radical NR⁶ and optionally the 5- to 7-membered saturated heterocycle which contains a radical of the formula NR⁷ and optionally additionally one nitrogen, oxygen or sulphur atom are substituted by one hydroxyl group and/or by a radical of the formula -NR⁸R⁹,

in which

R⁶ and R⁷ are identical or different and each represents hydrogen, (C₁-C₄)-alkyl, hydroxy-(C₁-C₄)-alkyl or (C₃-C₆)-cycloalkyl,

R⁸ and R⁹ are identical or different and each represents hydrogen, (C₁-C₄)-alkyl or (C₃-C₆)-cycloalkyl,

or

contd.
a¹

R⁸ and R⁹ together with the nitrogen atom form a 5- to 7-membered saturated heterocycle which may optionally additionally contain one oxygen or sulphur atom or a radical of the formula NR¹⁰,

in which

R¹⁰ represents hydrogen, (C₁-C₄)-alkyl or (C₃-C₆)-cycloalkyl,

and

R³ represents a phenyl, pyridyl or thienyl ring which is optionally mono or polysubstituted by radicals selected from the group consisting of fluorine, chlorine, cyano, trifluoromethyl and trifluoromethoxy,

and their enantiomers and diastereomers and their respective salts, hydrates and prodrugs.

3. (Amended) Compounds according to Claim 1 or 2

where

A, D and E each represent the CH group,

G represents a nitrogen atom or represents the CH group,

L¹ and L² each represent hydrogen,

R¹ represents a radical of the formula -CO-NR⁴R⁵,

contd.
*a*¹

in which

R^4 and R^5 each represent hydrogen,

R^2 represents (C₁-C₄)-alkyl which is optionally interrupted by an oxygen atom, or represents a 4- R^7 -piperazin-1-yl radical,

where (C₁-C₄)-alkyl, which is optionally interrupted by an oxygen atom, is substituted by a hydroxyl group or by a radical of the formula $-NR^8R^9$,

in which

R^7 represents hydrogen, (C₁-C₄)-alkyl or (C₃-C₆)-cycloalkyl,

R^8 and R^9 are identical or different and each represents hydrogen, (C₁-C₄)-alkyl or (C₃-C₆)-cycloalkyl,

or

R^8 and R^9 together with the nitrogen atom form a morpholine radical,

and

R^3 represents a phenyl or pyridyl radical which may optionally be mono- or polysubstituted by fluorine,

and their enantiomers and diastereomers and their respective salts, hydrates and prodrugs.

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a¹
4. (Amended) Compounds according to Claim 1

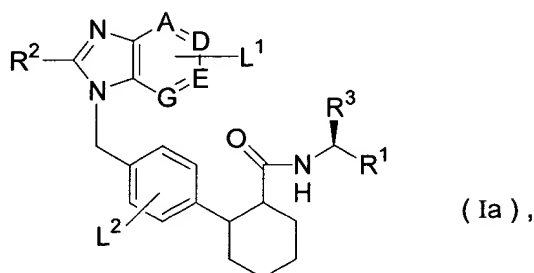
where

the radical R^1 represents a radical of the formula $CO-NR^4R^5$ where R^4 and R^5 are hydrogen.

and

the other radicals are as defined in Claim 1.

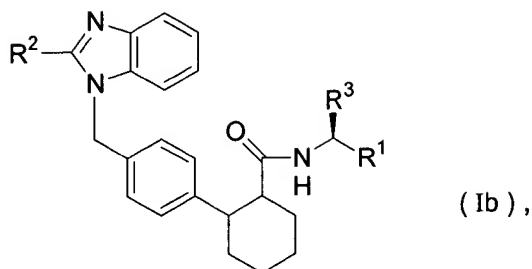
5. (Amended) Compounds according to Claim 1, characterized by the following stereochemistry according to formula (Ia):



where the substituents R^1 , R^2 , R^3 , L^1 and L^2 and the radicals A, D, E and G are each as defined in Claim 1.

6. (Amended) Compounds according to Claim, having structural formula Ib and characterized by the following stereochemistry according to formula (Ib)

contd.
a¹



in which

R^1 represents a group $-C(O)-NH_2$,

R^2 represents (C_1-C_4) -alkyl which is substituted at the terminal C atom by a hydroxyl group,

R^3 represents a phenyl ring which is optionally substituted in the para position by fluorine,

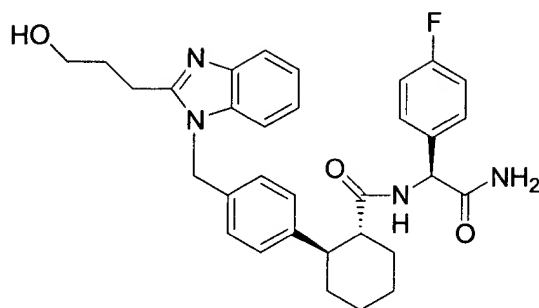
or

represents a pyridyl radical,

and their diastereomers and their respective salts, hydrates and prodrugs.

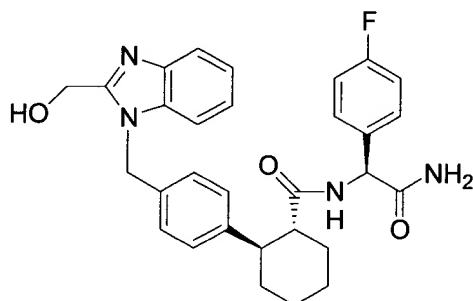
7. (Canceled) Compounds of the general formula (I) of the following structures:

(S)-N-{[(1R,2R)-2-{4-{[2-(3-hydroxypropyl)-1H-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-(4-fluorophenyl)glycinamide:



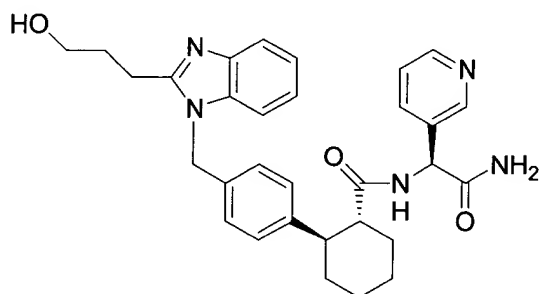
and their salts, hydrates and, if appropriate, their prodrugs.

(S)-N- {[(1*R*,2*R*)-2- {4- {2-hydroxymethyl}-1*H*-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-(4-fluorophenyl)glycinamide:

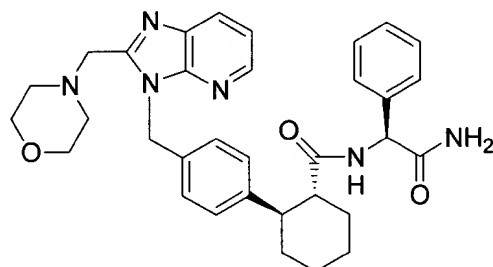


(S)-N- {[(1*R*,2*R*)-2- {4- {2-(2-hydroxyethyl)-1*H*-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-phenyl]glycinamide:

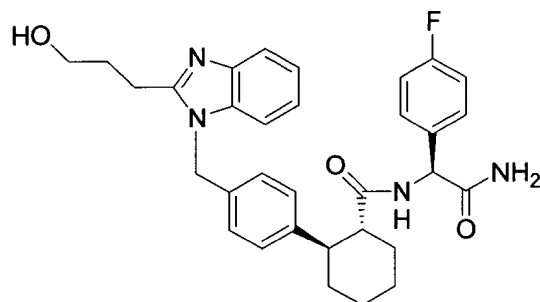
(S)-N- {[(1*R*,2*R*)-2- {4- {2-(3-hydroxypropyl)-1*H*-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-(3-pyridyl)glycinamide:



(S)-N-{{{(1*R*,2*R*)-{4-{2-[2-morpholin-4-yl-methyl]-1*H*-pyrido[2,3-*d*]imidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-phenylglycinamide:

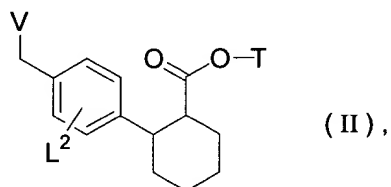


(S)-N-[[[(1*R*,2*R*)-2-{4-{[2-(3-hydroxypropyl)-1*H*-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-(4-fluorophenyl)] glycinamide:



8. (Amended) Process for preparing compounds of the general formula (I) according to Claim 1, characterized in that

(A) compounds of the general formula (II)



contd.
a²
in which

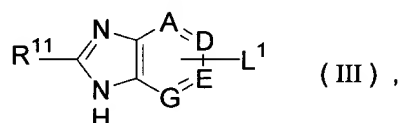
L^2 is as defined above in claim 1,

T represents (C_1-C_4) -alkyl,

and

V represents a suitable leaving group,

are initially converted by reaction with compounds of the general formula (III)



in which

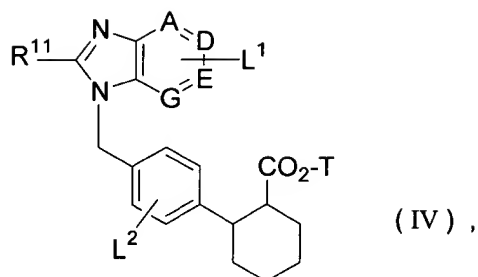
A, D, E, G, and L^1 are each as defined above in claim 1

and

R^{11} has the meaning of R^2 given above in claim 1, where amino and hydroxyl functions are optionally blocked by suitable amino- or hydroxyl- protective groups,

in inert solvents, depending on the definition of R^{11} optionally in the presence of a base, into the compounds of the general formula (IV)

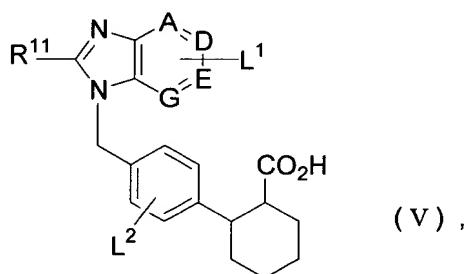
contd.
a²



in which

R^{11} , A, D, E, G, L^1 , L^2 and T are each as defined above in claim 1,

which are converted in a subsequent step using acids or bases into the corresponding carboxylic acids of the general formula (V)

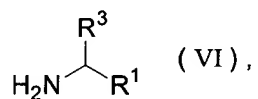


in which

R^{11} , A, D, E, G, L^1 , L^2 are each as defined above in claim 1,

which are, if appropriate, activated, by conversion into a corresponding carboxylic acid derivative,

and which are subsequently reacted with compounds of the general formula (VI) or salts thereof



in which

contd.
a²

R¹ and R³ are each as defined above in claim 1

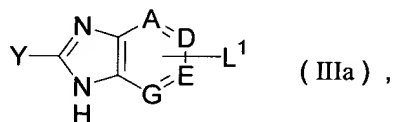
in inert solvents,

and, if R¹¹ carries one of the abovementioned protective groups, this is optionally removed by customary methods either in the hydrolysis to the acids (IV) → (V) or after the reaction with the compounds of the general formula (VI),

or

(B) if R² represents a saturated heterocycle which is attached directly to the imidazole ring via a nitrogen atom,

the above mentioned compounds of the general formula (II) are initially converted with compounds of the general formula (IIIa)



in which

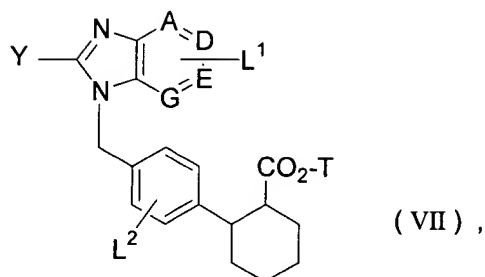
A, D, E, G and L¹ are each as defined above in claim 1

and

Y represents halogen or mesylate,

in inert solvents into the corresponding compounds of the formula (VII)

contd.
a²



in which

Y, A, D, E, G, L¹, L² and T are each as defined above in claim 1,

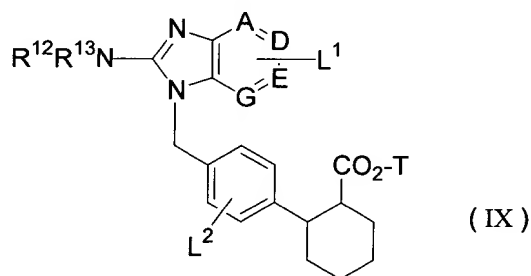
which are reacted in a subsequent step with compounds of the general formula
(VIII)



in which

R¹² and R¹³ together with the nitrogen atom form a heterocycle according to the
definition of R² given in claim 1

to give compounds of the general formula (IX)

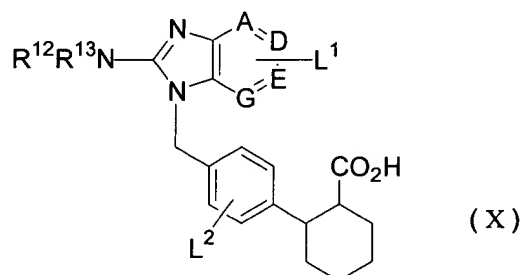


in which

A, D, E, G, L¹, L², R¹², R¹³ and T are each as defined above in claim 1,

contd.
a²

which are, in the subsequent steps, converted as described under (A) by hydrolysis into the corresponding carboxylic acids of the general formula (X)



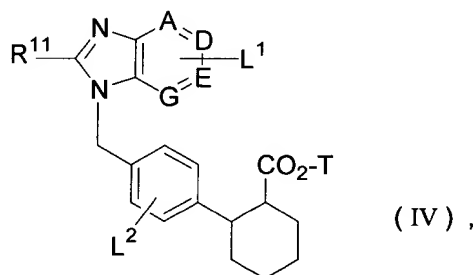
in which

A, D, E, G, L¹, L², R¹² and R¹³ are each as defined above in claim 1

and these compounds are finally reacted with the compounds of the general formula (VI) according to known methods for preparing amides from carboxylic acids and amines and converted into the compounds of the general formula (I)

where the compounds of the general formula (I) obtained according to process variant (A) or (B) can, if appropriate, subsequently be converted into the corresponding salts.

9. (Amended) Compounds of the general formula (IV)



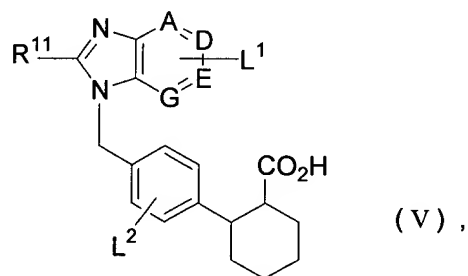
in which

contd.
a²

A, D, E, G, L¹, L², R¹¹ and T are each as defined above in claim 1,

and their enantiomers and diastereomers and their respective salts.

10. (Amended) Compounds of the general formula (V)

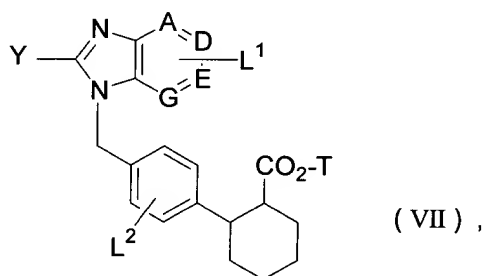


in which

A, D, E, G, L¹, L² and R¹¹ are each as defined above in claim 1,

and their enantiomers and diastereomers and their respective salts.

11. (Amended) Compounds of the general formula (VII)



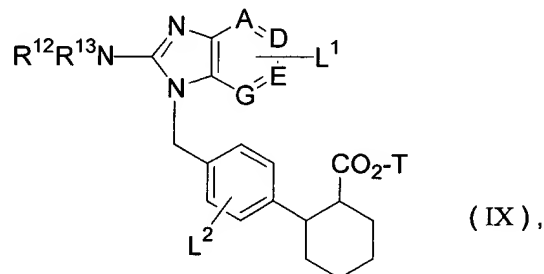
in which

A, D, E, G, L¹, L², Y and T are each as defined above in claim 1,

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a²

and their enantiomers and diastereomers and their respective salts.

12. (Amended) Compounds of the general formula (IX)

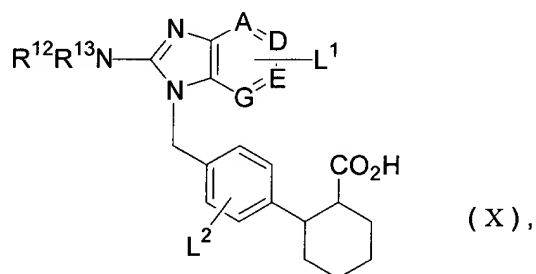


in which

A, D, E, G, L¹, L², R¹², R¹³ and T are each as defined above in claim 1,

and their enantiomers and diastereomers and their respective salts.

13. (Amended) Compounds of the general formula (X)



in which

A, D, E, G, L¹, L², R¹³, R¹² are each as defined above in claim 1.

and their enantiomers and diastereomers and their respective salts.

- a³ 16. (Amended) A pharmaceutical composition comprising a compound of the general formula (I) according to Claim 1 in admixture with at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.

- a⁴ 21. (New) Compounds according to Claim 2

where

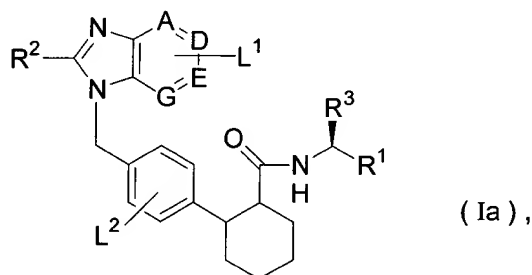
the radical R¹ represents a radical of the formula CO-NR⁴R⁵ where R⁴ and R⁵ are hydrogen

and

the other radicals are as defined in Claim 2.

~~New claims 22-24 have been broken out of original improper multiple dependent claim 5.~~

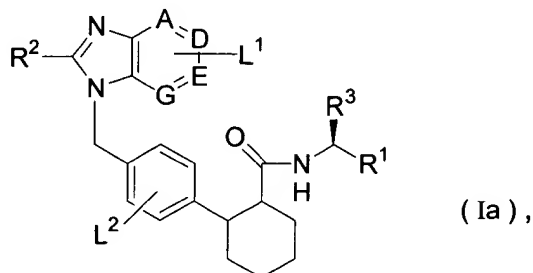
22. (New) Compounds according to Claim 2, characterized by the following stereochemistry according to formula (Ia):



contd.
a⁴

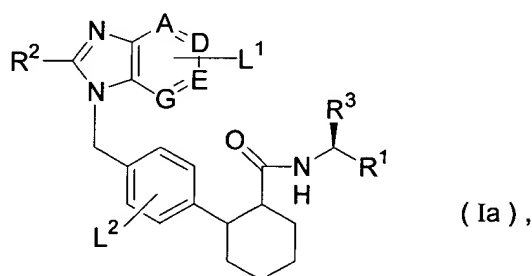
where the substituents R^1 , R^2 , R^3 , L^1 and L^2 and the radicals A, D, E and G are each as defined in Claim 2.

23. (New) Compounds according to Claim 3, characterized by the following stereochemistry according to formula (Ia):



where the substituents R^1 , R^2 , R^3 , L^1 and L^2 and the radicals A, D, E and G are each as defined in Claim 3.

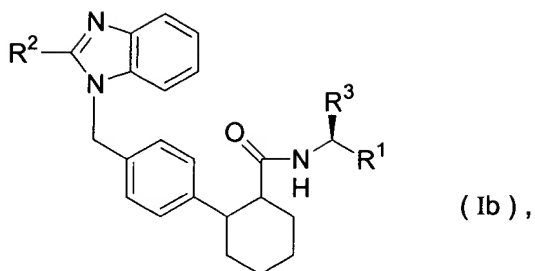
24. (New) Compounds according to Claim 4, characterized by the following stereochemistry according to formula (Ia):



where the substituents R^1 , R^2 , R^3 , L^1 and L^2 and the radicals A, D, E and G are each as defined in Claim 4.

25. (New) Compounds according to Claim 2, having structural formula Ib and characterized by the following stereochemistry according to formula (Ib)

contd.
a4



in which

R^1 represents a group $-C(O)-NH_2$,

R^2 represents (C_1-C_4) -alkyl which is substituted at the terminal C atom by a hydroxyl group,

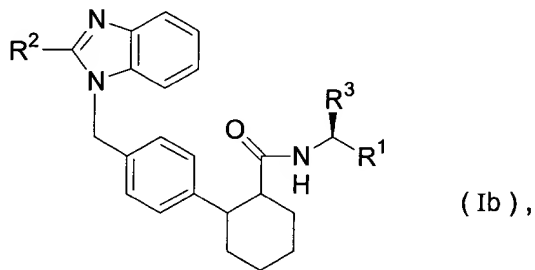
R^3 represents a phenyl ring which is optionally substituted in the para position by fluorine,

or

represents a pyridyl radical,

and their diastereomers and their respective salts, hydrates and prodrugs.

26. (New) Compounds according to Claim 3, having structural formula Ib and characterized by the following stereochemistry according to formula (Ib)



contd.
a⁴

in which

R^1 represents a group $-C(O)-NH_2$,

R^2 represents (C_1-C_4) -alkyl which is substituted at the terminal C atom by a hydroxyl group,

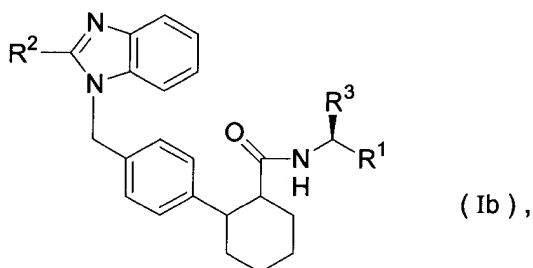
R^3 represents a phenyl ring which is optionally substituted in the para position by fluorine,

or

represents a pyridyl radical,

and their diastereomers and their respective salts, hydrates and prodrugs.

27. (New) Compounds according to Claim 4, having structural formula Ib and characterized by the following stereochemistry according to formula (Ib)



in which

R^1 represents a group $-C(O)-NH_2$,

contd.
Q 4

R^2 represents (C₁-C₄)-alkyl which is substituted at the terminal C atom by a hydroxyl group,

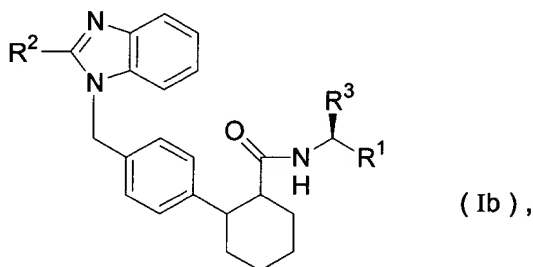
R^3 represents a phenyl ring which is optionally substituted in the para position by fluorine,

or

represents a pyridyl radical,

and their diastereomers and their respective salts, hydrates and prodrugs.

28. (New) Compounds according to Claim 5, having structural formula Ib and characterized by the following stereochemistry according to formula (Ib)



in which

R^1 represents a group $-C(O)-NH_2$,

R^2 represents (C₁-C₄)-alkyl which is substituted at the terminal C atom by a hydroxyl group,

R^3 represents a phenyl ring which is optionally substituted in the para position by fluorine,

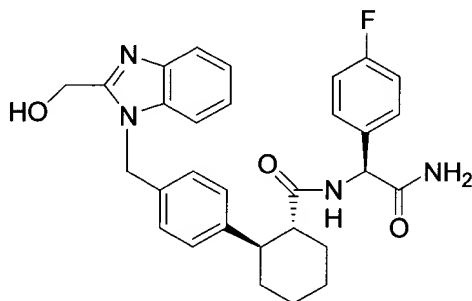
or

represents a pyridyl radical,

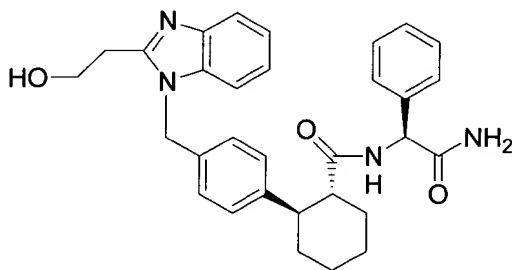
and their diastereomers and their respective salts, hydrates and prodrugs.

29. (New) Compounds of the general formula (I) of the following structures:

(S)-N-{[(1*R*,2*R*)-2-{4-{[2-(hydroxymethyl)-1*H*-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-(4-fluorophenyl)glycinamide:

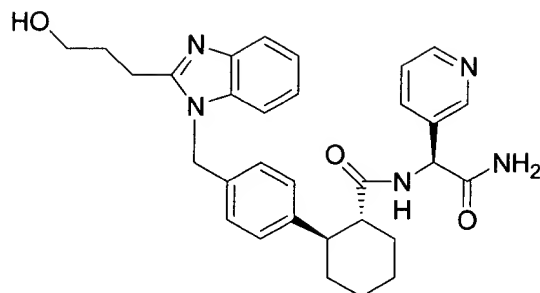


(S)-N-{[(1*R*,2*R*)-2-{4-{[2-(2-hydroxyethyl)-1*H*-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-phenylglycinamide:

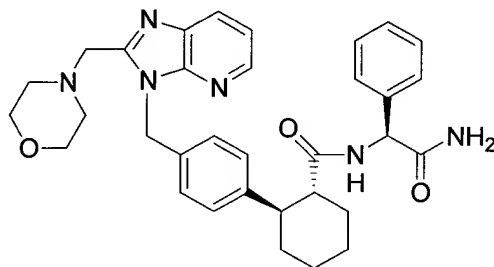


(S)-N-{[(1*R*,2*R*)-2-{4-{[2-(3-hydroxypropyl)-1*H*-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl]carbonyl}-(3-pyridyl)glycinamide:

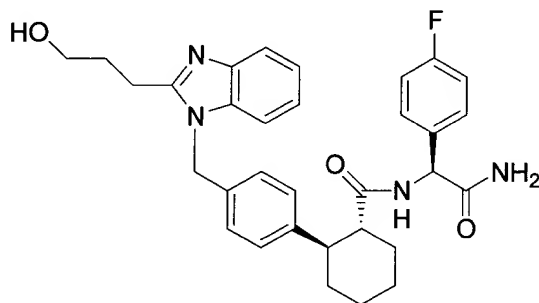
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(S)-N-{{(1R,2R)-4-{2-[2-(morpholin-4-yl-methyl)-1H-pyrido[2,3-d]imidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl}carbonyl}-phenylglycinamide:



(S)-N-[[{(1R,2R)-2-{4-{{2-(3-hydroxypropyl)-1H-benzimidazol-1-yl]methyl}-phenyl}-cyclohex-1-yl}carbonyl}-(4-fluorophenyl)glycinamide:



and their salts, hydrates and, if appropriate, their prodrugs.

contd.
a 4

30. (New) The process of claim 8 wherein T represents methyl or tert-butyl.
31. (New) The process of claim 8 wherein V represents halogen, mesylate, or tosylate.
32. (New) The process of claim 31 wherein V represents bromine.
33. (New) The process of claim 8 wherein said carboxylic acid derivative of a compound of formula V is a carbonyl halide, carboxylic anhydride or carboxylic ester.
34. (New) The process of claim 8 wherein Y of formula IIIa is chlorine or bromine.
35. (New) The process of claim 8 wherein the steps of converting the compounds of general formula I into the corresponding salts, as provided in the final paragraph of claim 8, is carried out by reaction with an acid.
36. (New) A pharmaceutical composition comprising a compound of the general formula (I) according to Claim 2 in admixture with at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.

*contd.
a 4*

37. (New) A pharmaceutical composition comprising a compound of the general formula (I) according to Claim 3 in admixture with at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
38. (New) A pharmaceutical composition comprising a compound of the general formula (I) according to Claim 4 in admixture with at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
39. (New) A pharmaceutical composition comprising a compound of the general formula (I) according to Claim 5 in admixture with at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
40. (New) A pharmaceutical composition comprising a compound of the general formula (I) according to Claim 6 in admixture with at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
41. (New) A pharmaceutical composition comprising a compound of the general formula (I) according to Claim 7 in admixture with at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
42. (New) A method of treatment or prophylaxis of a disorder in a mammal comprising administering an effective amount of a compound of claim 1.

*contd.
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43. (New) The method of claim 42 wherein said disorder is an ischaemic disorder of the cardiovascular system.
44. (New) The method of claim 42 wherein said mammal is human.
45. (New) A method of treatment or prophylaxis of a disorder in a mammal comprising administering an effective amount of a compound of claim 2.
46. (New) The method of claim 45 wherein said disorder is an ischaemic disorder of the cardiovascular system.
47. (New) The method of claim 45 wherein said mammal is human.
48. (New) A method of treatment or prophylaxis of a disorder in a mammal comprising administering an effective amount of a compound of claim 3.
49. (New) The method of claim 48 wherein said disorder is an ischaemic disorder of the cardiovascular system.
50. (New) The method of claim 48 wherein said mammal is human.

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51. (New) A method of treatment or prophylaxis of a disorder in a mammal comprising administering an effective amount of a compound of claim 4.
52. (New) The method of claim 51 wherein said disorder is an ischaemic disorder of the cardiovascular system.
53. (New) The method of claim 51 wherein said mammal is human.
54. (New) A method of treatment or prophylaxis of a disorder in a mammal comprising administering an effective amount of a compound of claim 5.
55. (New) The method of claim 54 wherein said disorder is an ischaemic disorder of the cardiovascular system.
56. (New) The method of claim 54 wherein said mammal is human.
57. (New) A method of treatment or prophylaxis of a disorder in a mammal comprising administering an effective amount of a compound of claim 6.
58. (New) The method of claim 57 wherein said disorder is an ischaemic disorder of the cardiovascular system.